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Credit Worthiness

Dingari Sreeram, Utkarsh Yadav

Did your dream of buying a car or starting a business got shattered at the beginning of your career as your loan was rejected due to the absence of credit history? You must be thinking, how do financial institutions decide who is creditworthy and who is not. It may be surprising to know that ability to pay is not the only factor for getting a loan. What determines your loan application approval is the evidence that you can pay your obligations on time. This evidence can be your past EMI payments, loan history, credit card payments, etc. In this article, we would like to discuss creditworthiness in the Covid era and how alternate data is changing the traditional credit scoring systems and enabling financial inclusion.

Are You Worthy?

Now, let us try to understand what creditworthiness is and how do we measure it. The underlying principles of determining an individual's creditworthiness use the Five C's of Credit, which helps the lender decide whether to issue a credit or not.

Credit bureaus collect repayment history across different credit lines to measure an individual's financial discipline and assign a credit score that quantifies the customer's creditworthiness. The credit score thus calculated mainly assesses the Character and the Capacity of the customer. For example, in India, CIBIL's credit score is calculated based on Payment History (30%), Credit Exposure (25%), Credit type and Duration(25%), and other factors such as hard inquiries for a loan (20%). Financial institutions acquire this credit score from the bureaus and use it to evaluate loan applications. Ironically, these institutions ask for credit history to give a loan, but they deny customers the chance to create credit history by rejecting a loan. It is similar to the dilemma of a fresh graduate who is asked for work experience but not given jobs to gain it in the first place.

In recent years, alternate data has augmented existing methods to assess the borrower's character and determine the conditions for the credit. The use of alternate data has been proven valuable in credit scoring. As per the Experion survey of 2019, 65% of companies already use alternate data in some form or other in credit decision making. For a developing country like India, where a majority of the population is still untouched by the formal credit system, the unavailability of credit history poses a great hurdle in assessing creditworthiness. Startups such as CreditVidhya, Perfios, Creditwatch, Capital Float & others have started harnessing the power of alternative data and advanced analytics in their credit scoring and have shown how they can be vital tools in assessing this new customer base. Before discussing the impact of these hidden customers in detail, let us first see how the retail loan market has performed in the last decade and its future growth potential.

5C's

CHARACTER	Borrower's Financial Reputation based on history of on time payments
CAPACITY	Ability to repay loans on time measured by Debt to Income ratio
CAPITAL	Higher down payments reduces probability of defaults and increases lenders confidence
COLLATERAL	Lenders can get back some value from collateral in case of default
CONDITION	Depends on Principal amount, Interest rate and purpose of loan.

Retail Loans in Indian Economy

According to bank credit data released by the Reserve bank of India, outstanding retail loans as of 31st march 2021 stood at 27.74 lakh crore, which is 14% annual growth over the last decade. This growth can be attributed to an increase in confidence of the lenders due to infrastructure improvement, the presence of data due to digitization, and customers' openness to take credit. All these changes show that the cultural stigma associated with taking loans is slowly fading away. Leveraging alternate data to correctly identify and rate the risk of an untapped segment of customers with no previous credit history can further increase the business for lenders and provide loans to people in need.

Creditworthiness in the Covid era

It is not an exaggeration to say that the Covid pandemic has affected each of us directly or indirectly. As our lives have seen ups and downs in this period, the global economies and markets also faced their fair share of difficulties. Faced with this challenge of the pandemic and threat to our lives, various governments have focussed on safety and health as their priority which is justifiable. Despite being effective in curbing the spread of the virus for some period, lockdowns have led to a rise in unemployment and a slump of cash flow. It is alarming that there is a resurgence of the third Covid wave in many countries. Although health and safety are paramount in this period, we also need to maintain good financial stability as post Covid recovery depends on it.

Due to the pandemic, many businesses and individuals are failing to pay bills and loans on time. Payment history is one of the main factors in credit rating, failure to pay the loans or credits on time will result in a drop in the individual's credit rating. As per financial institutions, the lower is the rating, the higher is the risk of customer default, and the more is the interest charged for his future loans. As of 1st March 2021, SBI charged a 6.7% interest rate for a customer with an 800+ credit rating, while others with a lower credit rating were charged higher. Due to the rise in unemployment & medical emergencies during the Covid pandemic, many customers could have missed their credit payments. Some credit card issuers and banks have offered deferred payments or late fee waivers, either voluntarily or under the direction of government policies. The resurgence of the second and now the third wave of covid-19 has made even the revised payment dates challenging for many.

Keeping in mind the impact of Covid 19, agencies cautioned people to maintain their financial health and credit scores. The credit scoring methods cannot be altered due to the pandemic as it will lead to improper credit risk assessment. The bureaus have increased access to reports and encouraged talks with lenders for deferred payments and waive-offs to handle the finances more effectively. We must stay up to date with the latest credit reports and make sure there are no errors. If any payments are missed during the pandemic, agencies have suggested adding consumer statements in the credit reports. Adding some facts like "Was ill due to Covid 19 and could not pay bills on time" in the consumer statements section of the credit report can highlight the problem.

Alternatives to the "conventional" credit scoring

Various financial institutions & fintechs are experimenting with novel approaches to look beyond the conventional ways of assessing creditworthiness and rate customers with no past credit history. Many customers don't have a long credit history, but even such customers pay post-paid mobile bills, electricity bills, rentals, and other utility bills. Some other data sources include records of owned assets, information about payments made for alternative lending options such as informal short-term loans, and transaction activity of checking accounts (withdrawals, recurring payments, and average balance). The above-mentioned alternative data sources can give insights about customers' financial discipline and spending habits to the lenders and are termed 'Alternative data'.

While issuing loans, lenders use a range of credit scores and their associated default rates. Lenders often use a cut-off point on these default rates for deciding credit scores that are lendable. This decision is based on the economic value of the loan by comparing the profit made on non-defaulters vs. the loss made on defaulters. Considering a hypothetical example, a lender may decide not to give a loan to a customer with a score in the range of 600-650 because the default rate for this score range is 4% and is not profitable for the lender. Even though 96% of these customers will not default, they still miss out on the loans. Alternative sources of data can be used to have a more refined look at these scores. Augmenting credit scores with alternative data will move many customers from non-lendable to lendable arena and provide access to reduced interest rates on loans. Thus, alternative data is incredibly beneficial for customers. It is also helpful for lenders as it increases the number of good loans while lowering transaction costs & losses.

The Covid pandemic has accelerated an already fast-moving digital economy by making digital payments a common sight across the country. Avenues of alternative data are increasing exponentially due to the uptick in online transactions on various payment apps and eCommerce websites. This trend is creating a lucrative opportunity for lenders to assess and include more potential customers. A vast stream of this alternative data is being generated, and with the increased availability of techniques to handle this Big data through machine learning and AI, we can find insights that would play a crucial role in banking the unbanked. This increased lending activity will provide access to funds for many individuals and help them in starting a new business, continuing education, or buying productive assets.

A word of caution

Another possible way of assessing creditworthiness would be to use psychometric tests to understand customers' personality insights and behaviours. However, it is prone to some elements of subjectivity. Some of the other alternative sources of data could be social media data, which could give a glimpse of an individual's lifestyle, traveling, and spending habits. The lenders should be very cautious while assessing data from psychometric tests and social media. This data is highly amenable to manipulation, especially when borrowers become aware of its usage in determining their creditworthiness. Alternative data is only useful when it is timely and accurately available. It should have wide coverage and should be available for most of the customers. Not all forms of alternative data are created equal; some have more predictive powers than others. The predictive power depends on the type and amount of loan for which it is used. While training with available past data, algorithms can be biased if training data fed to it is biased against gender, sexual orientation, age, race, and other characteristics. It is necessary to make sure that algorithms can reverse or minimize the prejudices in training data.

These alternative Big data sources can be used to train Machine learning algorithms and find valuable information for classifying worthy customers. Though a wide variety of models could be used to score or cluster customers based on these alternative data sources, one must be careful while selecting these algorithms. There is often a need for explainable and simpler models like decision trees compared to black-box models like deep learning (though the latter may be much more powerful!). Explainable models are preferable as they help lenders to explain to the customers why they were rejected. Similarly, lenders can explain to their top management why were the new business opportunities not seized. These models also help in explaining to the regulators why a specific business decision was taken.

The guiding principle of assessing the creditworthiness of credit-invisible people is not to provide credit to all but is to identify worthy individuals who have the ability and willingness to pay back. This sort of financial inclusion would have multiple benefits like providing credit to deserving customers, increasing the customer base for lenders, and promoting economic activity for the nation.